

All weirs are rectangular

Thanks

Doug Peterson

June 5, 1995

Dear Harlod Jones;

Here are the water measurements I said I would send to you. For May 1994 we only measured our own water. The reading on the pond is we received after all other users on the ditch.

In June of 1994 we installed a weir to measure the water of the next user up the ditch. The difference between this reading and our reading would be the usage of water for the Bowls right.

For 1995 we have a weir in the diversion from spring creek just before the water mixes with the pahimeric river. We only read this weir twice a week because of the distance. It does remain fairly consistant.

We also have a percent loss on the ditch between our weir on the road, after the last user, and our pond. We have lowered our loss to 10% to 15%. It doesn't usually get much higher than that.

The biggest problem we had on the ditch is the fluctuation of the water. Sometimes it would vary over half of our water right. We were told that other peoples waste water from flood irrigation hadn't reached the ditch yet. We also encounter mild resistance when we put weirs in the ditch so that we could measure the water.

I hope this information is helpful. If you have any questions please feel free to call me at (208) 878-4450.

Thanks

Doug Parkinson

May 1994

Pond

Parkinson Road

Date	Head Ft	Each	GPM	Head Ft	Each	GPM	% Loss
May 2	.60	299.0	2692.8	.57	429.35	3869.17	31
3	.62	314.16	2827.44	.60	528.59	4757.28	41
4	.20	58	529.58	.32	288	1870.98	73%
5	0	0	0	.16	73.8	664.22	100%
6	.10	20.89	188.05	.24	135.64	1220.14	85%
7	.12	27.43	216.84	.76	153.09	1377.82	82%
8	.14	42.14	377.24	.26	153.09	1377.82	72%
9	.18	14.94	131.64	.26	153.09	1377.82	70%
10	.50	228.89	2059.97	.48	380.98	3428.83	40%
11	.50	228.89	2059.97	.50	404.92	3644.26	44%
12	.46	207.46	1822.13	.48	380.98	3428.83	47%
13	.50, 46	207.46	1822.13	.50	404.92	3644.26	50%
14	.48	210.94	1898.42	.50	404.92	3644.26	48%
15	.46	208.89	1822.13	.50	404.92	3644.26	50%
16	.42	177.03	1593.24	"	"	"	52%
17	"	"	"	"	"	"	"
18	.45	208.89	1822.13	.48	380.98	3428.83	45%
19	.54	256.32	2306.83	.50	404.92	3644.26	37%
20	.54	"	"	.52	429.35	3869.17	"
21	"	"	"	.50	404.92	3644.26	"
22	.32	118.18	1043.26	.50	404.92	3644.26	79%
23	.52	242	2181	.50	404.92	3644.26	40%
24	.52	256	2306.83	.50	404.92	3644.26	"
25	.52	242	2181	.44	335.10	3015.94	88%
26	.40	248	2239.51	.44	335.10	3015.94	31%
27	"	"	"	.44	335.10	3015.94	"
28	.36	212.43	1911.89	.46	358.04	3222.38	41%
29	"	"	"	"	"	"	"
30	"	"	"	"	"	"	"
31	"	"	"	"	"	"	"
4	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"
17	.40	248	2239.51	.44	335.10	3015.94	31%
18	"	"	"	.44	335.10	3015.94	"
19	.36	212.43	1911.89	.46	358.04	3222.38	41%
20	"	"	"	"	"	"	"
21	"	"	"	"	"	"	"
22	"	"	"	"	"	"	"
23	"	"	"	"	"	"	"
24	"	"	"	"	"	"	"
25	"	"	"	"	"	"	"
26	.36	212.43	1911.89	.46	358.04	3222.38	41%
27	.38	230.38	2073.46	.48	380.98	3428.83	40%
28	.40	248	2239.51	.50	404.92	3644.26	39%
29	.34	195.48	1759.20	.50	404.92	3644.26	57%
30	.44	286.23	2580.6	.54	454.29	4088.57	37%
31	.44	296.13	2580.6	.54	454.29	4088.57	37%
32	.48	354.5	3145.1	.48	380.98	3428.83	17%
33	.48	354.5	3145.1	.50	404.92	3644.26	39%

↑ New water in ditch

↓ No water in ditch

Date	Madson				Parkinson				Road				Pond			
	Head Ft.	Inches	GPM	Inches Used	Head Ft.	Inches	GPM	% Loss	Head Ft.	Inches	GPM	% Loss	Head Ft.	Inches	GPM	
July 11	150	518.3	4936	233	142	313	280		230		280					
12	152															
13	152															
14	152															
15	152	632	5744	288	158	404	3644	5%	154	494	732	5%	154	494	4085	
16	152	632	5744	288	154	454	4088		152	454	4088					
17	152	632	5744	288	150	404	3644		150	404	3644					
18	152	632	5744	288	144	360			144	360						
19	152	632	5744	288	140	320			140	320						
20	152	632	5744	288	136	280			136	280						
21	152	632	5744	288	132	240			132	240						
22	152	632	5744	288	128	200			128	200						
23	152	632	5744	288	124	160			124	160						
24	152	632	5744	288	120	120			120	120						
25	152	632	5744	288	116	80			116	80						
26	152	632	5744	288	112	40			112	40						
27	152	632	5744	288	108	0			108	0						
28	152	632	5744	288	104				104							
29	152	632	5744	288	100				100							
30	152	632	5744	288	96				96							
31	152	632	5744	288	92				92							

Rate	Head Ft.	Inch	GPM	% Loss	Head Ft.	Inch	GPM	% Loss	Head Ft.	Inch	GPM	% Loss	Head Ft.	Inch	GPM
1 M	1.72	3.00	7100	3.8	1.52	2.97	3300	4.2	1.32	2.90	3400	4.8	1.12	2.80	3500
2 M	1.56	2.97	7100	3.8	1.32	2.90	3300	4.2	1.12	2.80	3400	4.8	0.92	2.70	3500
3 M	1.42	2.93	5480	2.8	1.22	2.93	4000	3.8	1.02	2.88	4000	4.5	0.82	2.84	4000
4 M	1.28	2.88	4970	2.8	1.02	2.88	3700	3.8	0.82	2.83	3700	4.5	0.62	2.78	3700
5 M	1.14	2.83	4570	2.8	0.82	2.83	3400	3.8	0.62	2.78	3400	4.5	0.42	2.73	3400
6 M	1.00	2.78	4170	2.8	0.62	2.78	3100	3.8	0.42	2.73	3100	4.5	0.22	2.68	3100
7 M	0.86	2.73	3770	2.8	0.42	2.73	2800	3.8	0.22	2.68	2800	4.5	0.02	2.63	2800
8 M	0.72	2.68	3370	2.8	0.22	2.68	2500	3.8	0.02	2.63	2500	4.5		2.58	2500
9 M	0.58	2.63	2970	2.8	0.02	2.63	2200	3.8		2.58	2200	4.5		2.53	2200
10 M	0.44	2.58	2570	2.8		2.58	1900	3.8		2.53	1900	4.5		2.48	1900
11 M	0.30	2.53	2170	2.8		2.53	1600	3.8		2.48	1600	4.5		2.43	1600
12 M	0.16	2.48	1770	2.8		2.48	1300	3.8		2.43	1300	4.5		2.38	1300
13 M	0.02	2.43	1370	2.8		2.43	1000	3.8		2.38	1000	4.5		2.33	1000
14 M		2.38	970	2.8		2.38	700	3.8		2.33	700	4.5		2.28	700
15 M		2.33	570	2.8		2.33	400	3.8		2.28	400	4.5		2.23	400
16 M		2.28	170	2.8		2.28	100	3.8		2.23	100	4.5		2.18	100
17 M		2.23	70	2.8		2.23	50	3.8		2.18	50	4.5		2.13	50
18 M		2.18	30	2.8		2.18	20	3.8		2.13	20	4.5		2.08	20
19 M		2.13	10	2.8		2.13	10	3.8		2.08	10	4.5		2.03	10
20 M		2.08	5	2.8		2.08	5	3.8		2.03	5	4.5		1.98	5
21 M		2.03	2	2.8		2.03	2	3.8		1.98	2	4.5		1.93	2
22 M		1.98	1	2.8		1.98	1	3.8		1.93	1	4.5		1.88	1
23 M		1.93	0.5	2.8		1.93	0.5	3.8		1.88	0.5	4.5		1.83	0.5
24 M		1.88	0.2	2.8		1.88	0.2	3.8		1.83	0.2	4.5		1.78	0.2
25 M		1.83	0.1	2.8		1.83	0.1	3.8		1.78	0.1	4.5		1.73	0.1
26 M		1.78	0.05	2.8		1.78	0.05	3.8		1.73	0.05	4.5		1.68	0.05
27 M		1.73	0.02	2.8		1.73	0.02	3.8		1.68	0.02	4.5		1.63	0.02
28 M		1.68	0.01	2.8		1.68	0.01	3.8		1.63	0.01	4.5		1.58	0.01
29 M		1.63	0.005	2.8		1.63	0.005	3.8		1.58	0.005	4.5		1.53	0.005
30 M		1.58	0.002	2.8		1.58	0.002	3.8		1.53	0.002	4.5		1.48	0.002

Quest m	Inches	9PM	usc	Inches	GPM	Aug	1994
2	68	603	321	377	3127		
3	765	685	418	347	3127		
4	685	6165	425	260	2834		
5	735	6615	444	291	2524		
6	735	6615	444	291	2623		
7	735	6615	376	359	3231		
8	610	5490	297	313	2821		
9	640	5760					
10	670	6030	319	291	2623		
11	735	6615	414	291	2623		
12							
13							
14							
15	493	4437	244	249	2241		
16	437	3937	228	201	1891		
17	377	3572.45	164	224	2056		
18	358	3222	169	187.5	1705		
19							
20							
21							
22	493	4437	244	249	2241		
23							
24							
25	605	485	257	201	1811		
26							
27							
28	670	6030	245	455	4085		
29	640	5760	210	430	3874		
30	670	6030	334	334	3024		
31							

Date	1995			Madson			8'			Inches			Road			7'			Pond			6'	
	Head Feet	Inches	GPM	Head Feet	Inches	GPM	Difference	Head Feet	Inches	GPM	Head Feet	Inches	GPM	Head Feet	Inches	GPM	Head Feet	Inches	GPM	Head Feet	Inches		GPM
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25																							
26																							
27																							
28																							
29																							
30																							
31																							
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25																							
26																							
27																							
28																							
29																							
30																							
31																							

% LOSS in ditch

Flooded

May 1995

Spring CreekDownton

May 19	.58	13.1 CFS	455 in	5895 gpm	22"
May 26	.58	13.1 CFS	655 in	5875 gpm	24"
May 27	.76	19.5 CFS	975 in	8775 gpm	
May 29	.8	31.1 CFS	1055 in	9495 gpm	26"



Water June 1995

	<u>Kenny Madson</u>	<u>diff</u>	<u>Berkinson</u>	<u>Pond</u>	<u>Denton</u>	<u>Spring Creek</u>
June 1	5963 gpm	1994 gpm	3969 gpm			
2m	5963 gpm	1994 gpm	3969 gpm	Flood	26"	10,313 gpm
3m	5523 gpm	1789 gpm	3734 gpm	1600 gpm + Flood		
E	5523 gpm	1789 gpm	3734 gpm			
4m	5963 gpm	1994 gpm	3969 gpm	Flood		
E	6549 gpm	2341 gpm	4208 gpm	Flood		
5	9140 gpm	4315 gpm	4825 gpm	Flood	30"	16,472 gpm